

**SPECIFICATION
FOR
DICTATION EQUIPMENT**

(This specification is released for procurement purposes until revised, or rescinded.)

SCOPE

This specification covers both desktop and portable dictating equipment. It is not meant to include all varieties of dictating equipment which may be commercially available, but is intended to cover only those generally used by state agencies and public schools.

I. CLASSIFICATION

This specification defines three styles of dictating systems which are categorized based on operational features and controls.

TYPE I - DIGITAL EQUIPMENT

TYPE II - ANALOG EQUIPMENT WITH MANUAL INDEXING

**TYPE III - ANALOG EQUIPMENT WITH ELECTRONIC CUEING (DUAL INDEXING MINIMUM)
WITH VISUAL DISPLAY, AUTO SCAN AND INDEXING.**

Above types shall include the following components.

- A. Portable (Handheld) Recorder – Digital (Class 1 through Class 3) and analog types.
- B. Transcribing Kit including Head Set, Foot Control, USB cable and Transcription software – Digital type only (Class 1 through Class 3).
- C. Desk Top Dictating Unit & Microphone – Analog types only.
- D. Self-contained Transcribing Unit, Head Set And Foot Control - Analog types only.
- E. Combination Dictating/Transcribing Unit. – Analog types only.

The digital recording media for the Type 1 equipment shall be either internal flash memory or readily removable flash memory as called for in the invitation for bids.

The analog recording media for the Types 2 and 3 equipment shall be either standard (s), mini (m) or micro (m.c.) magnetic tape cassettes as called for in the invitation for bids.

II. APPLICABLE STANDARDS

The following documents of issue in effect on the date of the invitation for bids shall form a part of this specification:

EIA STANDARDS AND SPECIFICATIONS
ELECTRONIC INDUSTRIES ASSOCIATION (EIA)
2001 "I" STREET N.W.
WASHINGTON, DC 20006

NEC STANDARDS
NATIONAL ELECTRIC CODE (NEC)
60 BATTERYMARCH STREET
BOSTON, MA 02110

UL LISTINGS
UNDERWRITERS LABORATORIES, INC. (UL)
PUBLICATIONS STOCK
333 PFINGSTEN ROAD
NORTHBROOK, IL 60062
FCC RULES AND REGULATIONS
FEDERAL COMMUNICATIONS COMMISSION (FCC)
WASHINGTON, DC

III. REQUIREMENTS

A. OPERATING POWER

Desktop machines shall be directly operable from 120 vac, 60 Hz source. The portable units shall be operable from either rechargeable nickel metal hydride batteries, rechargeable nickel cadmium batteries, manganese-alkaline heavy-duty dry cell batteries or an appropriate listed or safety certified labeled, ac power adapter for operating the unit on 120 vac, 60 hz. Batteries shall provide battery capacity for a minimum expected operating time of 8 hours of continuous use of playback or recording functions between charging or replacement.

Portable handheld digital recorders shall be provided with the following batteries and chargers:

Class 1 Portable Recorder - Rechargeable nickel metal hydride batteries and charging adaptor integral to recorder cradle for charging while downloading voice files.

Class 2 Portable Recorder - Rechargeable nickel metal hydride batteries and charger that may be completely detached from the recorder for charging.

Class 3 Portable Recorder - Manganese-alkaline heavy-duty dry cell batteries without any charger.

B. ELECTRICAL CORD AND PLUG

In the case of machines designed principally for battery operation, a 2-wire connection provided through a desktop cradle or a cord from the ac adapter/charger is acceptable provided that the adapter/charger plugs directly into a standard wall outlet.

C. SAFETY CERTIFICATION

Equipment connected to a 120 vac input power shall have a safety certification label or acceptable proof that the equipment has been evaluated by an independent third party laboratory acceptable by the North Carolina Building Codes Council for compliance with the current edition of the applicable UL safety standard.

Equipment designed principally for battery operation, the ac adapter/charger shall have a safety certification label or acceptable proof that the equipment has been evaluated by an independent third party laboratory acceptable by the North Carolina Building Codes Council for compliance with the current edition of the applicable UL safety standard. If applicable, the digital recorder, download cradle, handset and foot controls shall also have an identical safety certification label as indicated above.

Acceptable safety certification providers include however are not limited to Underwriters Laboratories, and Intertek (ETL).

D. RECORDING MEDIA

Digital Equipment - The recording media shall be either internal flash memory or readily available removable flash memory, as called for in the invitation for bids. Typical examples of removable flash

memory include but are not limited to xD, SD, Multimedia, Flash Card or Memory Stick. The required memory type and size is outlined in the Invitation For Bids.

Portable handheld digital recorders shall be provided with the following flash memory recording media:

Class 1 Portable Recorder – Minimum 32MB removable media and expandable to a minimum of 1GB.

Class 2 Portable Recorder - Minimum 32MB removable media and expandable to a minimum of 1GB.

Class 3 Portable Recorder – Minimum 256MB internal, non-removable.

Analog Equipment - The recording media (tape) shall be either standard, mini, or micromagnetic packaged as a cassette. The required classification of tape is outlined in the invitation for bids. The standard and micro cassettes shall provide at least 60 minutes total recording time per cassette and the mini cassette shall provide at least 30 minutes recording time.

E. EQUIPMENT OPERATING CHARACTERISTICS

Digital Equipment - Following characteristics shall apply to all Type 1 equipment covered in this specification.

- Class 1 and Class 2 recorders shall have a minimum of two record and playback modes, Standard Play (SP) and Long Play (LP). The Class 3 recorder shall have a High Quality (HQ) mode in addition to the SP and LP modes.
- Portable recorders shall provide the following minimum specified file formats. Additional file formats may be provided.

<u>Required Portable Recorder</u>	<u>Required File Formats</u>	<u>Maximum File Size Required Per Hour of Voice Recording</u>
Class 1	DSS	6.6 MB per hour
Class 2	DSS, ADPCM, CLEP or similar compressed file format	6.6 MB per hour
Class 3	WAV or WMA	8.2 MB per hour

- The portable recorders shall have a minimum recorded frequency response and data sampling rates as follows:

<u>Record & Playback Modes</u>	<u>Min. Frequency Response</u>	<u>Min. Sampling Frequency</u>
Standard Play(SP)	300 to 5 kHz +/- 3 db	12 kHz
Long Play (LP)	300 to 3 kHz +/- 3 db	7 kHz
High Quality (HQ) (HQ mode required only for Class 3 recorders)	300 to 7 kHz +/- 3 db	44 kHz

Analog Equipment – Following characteristics shall apply to all Type 2 and Type 3 equipment covered in this specification.

- Tape speed:** The following tape speeds (common to the voice recorder industry) are acceptable.
Standard: 4.8 cm/sec or 2.4 cm/sec (1.875, 0.94 ips),
Mini: 38 RPM, micro: 2.4 or 1.2 cm/sec (0.94, 0.47 ips).
Bidder to specify actual speed of recording/playback units.
- The units shall be capable of recording and playback within the following frequency response ranges: 1 KHz to 5 KHz +/- 3 db Ref. 1 KHz or 100Hz to 1 KHz +/- 4 db Ref. to 1 KHz.
Bidder to specify actual response range.
- The braking action on the start stop actuation shall be virtually instantaneous without loss of recording (no "clipped" words).

F. GENERAL

Digital Equipment - Type 1 equipment.

Digital portable recorders are to be furnished with at least the following accessories: (1) batteries, (2) protective case or cover, (3) one internal or removable flash memory, and (4) PC connectivity software for file download and format conversion. In addition, the appropriate battery pack, ac adapter/charger, ac adapter or ac charger is required or shall be available for purchase as indicated herein. A remote record switch or foot control is to be made available for optional purchase.

The digital transcription kit shall include a headset, foot controls, USB cable and PC software with network connectivity for file transcription, format conversion, archive, email and sever routing. The software shall include addition functionality as indicated herein. Companion unit/model of identical manufacturer shall be interpreted as media or file format compatible with same class of digital portable recorder. Features and controls listed are deemed minimal for each classification, and are not intended to describe all those commercially available.

Analog Equipment – Type 2 and Type 3 equipment.

Analog portable recorders are to be furnished with at least the following accessories: (1) batteries, (2) protective case or cover, (3) one recording media (cassette tape). In addition, the appropriate battery pack, ac adapter/charger, ac adapter or ac charger is to be made available for purchase.

The analog desk type-transcribing unit shall include a headset and foot control with start, stop, and backup and rewind functions. Features and controls listed are deemed minimal for each classification, and are not intended to describe all those commercially available. The combination dictating/transcribing unit shall include all of these. One recording media (cassette) shall be included with each dictating and combination unit.

G. DETAIL DESCRIPTIONS

TYPE 1 DIGITAL EQUIPMENT

1A. PORTABLE (HAND HELD) RECORDER

Class 1 and 2 recorders provide slide switch controls for record and edit functions. Edit function are to include the ability to add indexing and denote priority recordings.

Recorder functions shall include start/stop, record, playback, fast forward, rewind, reverse, and erase. Class 1 and 2 recorders shall include Insert, append, and overwrite dictation and partial erase functions at any time after original recording. Class 1 and 2 recorders also include rewind or fast forward playback review in increments of 1-5 seconds or adjustable time increments.

Recorders are provided with document management capabilities to separate recordings into a minimum of 5 folders with each allowing a minimum of 100 messages or a similar structure. Access of messages in stored folders or other major groupings shall not require sequentially skipping through individual messages in the preceding folder or named group.

Class 1 recorders shall be capable of recording in an encrypted format for HIPAA compliant medical documents.

PC connectivity software shall be provided for all recorders to download files and format conversion to a minimum WAV or WMA formats. The PC connectivity recorder software may be provided with an automatic conversion routine that downloads and converts voice files for compatibility to the speech recognition software. Software or recorder file formats shall be recognized and compatible by Dragon Naturally Speaking Preferred and Professional Software, Versions 8 and 9.

Recorders shall have a built-in microphone, with dictation & conference recording sensitivity modes. Connectors are provided for earphones or headset, external microphone, and a USB PC connection port. An LCD display provides visual indication of recording time reference, battery strength, mode of operation and document or message identification. An LED display may indicate recording status.

Recorders are to include a Built-in Speaker with an equivalent minimum diameter as follows: 28 mm for Class 1 and Class 2 recorders and 20 mm diameter for Class 3 recorders.

The identical file format compatibility shall be provided between (1) recorders, (2) download software provided with recorder and (3) the transcribing kit without the use of any interfacing unit. Transcription unit provided shall be of the same manufacturer as the recorder. The PC connectivity software provided with the Class 1 recorder shall be compatible with Windows 98, XP & 2000 and Apple Mac operating systems 9.2 through 10.4. The PC connectivity software provided with the Class 2 and 3 recorders shall be compatible with a minimum of Windows XP & 2000 operating systems.

Accessories provided with unit shall include owner's manual, protective case or cover, batteries (type indicated above) and one recording media card, and download software (as indicated above).

Optional accessories shall include a battery pack (if applicable), rechargeable batteries, battery charger, ac charger/adaptor, and a telephone-recording adaptor. Foot controls shall be an available accessory to control the recording function, except for Class 3 recorders.

1B. TRANSCRIBING KIT, HEADSET, FOOT CONTROL, USB CABLE AND SOFTWARE

Transcription kit shall be compatible with file formats, data transfer and recorder/ playback functions without the use of any interfacing unit. Kit shall be of the same manufacturer as product offered for Section 1A recorder description. Software shall configure a computer to implement the following minimum features: on/off/standby power switch, volume control, speed control, fast forward, rewind (back space), erase capability, and visual display as described in Section 1A. Kit is furnished with headset and foot controls for start/stop backspace and rewind functions. Also includes a USB cable for computer connection to the recorder.

The transcription kit software shall also configure a computer to implement the following features (as applicable for recorder class):

- Download verification by visually, audibly or both,
- Provide indication of priority or indexed messages,
- Ability to view the number of files and special instructions,
- Ability to remember where stopped transcribing in the event must start a new transcription and return to the previous file,
- Ability to track dictation and transcription status,
- Ability to random access within a visual display to any timed location within a message or single recording.

The transcription kit software compatible with the **Class 1 recorders** shall recognize the author ID on the recorder and automatically download the voice files into the appropriate folder with a unique file ID number. Based upon the author profile, voice files can be routed to predefined locations: PC workstation (peer to peer network) transcriptions, local area network (LAN) directories, wide area network (WAN) directories, automatic routing of e-mail or multiple e-mail addresses, automatic routing to multiple FTP addresses. Instant e-mail feature allows author to send voice files, as an attachment to any e-mail message. Software shall be capable of file decryption from digital recorder of identical brand recorder for HIPAA compliant medical documents.

The transcription kit software for **all classes of recorders** shall be able to download and convert recorder or transcriber file formats into a minimum WAV or WMA formats. The software may be provided with an automatic conversion routine that downloads and converts voice files for compatibility to the speech recognition software. Software or file formats shall be recognized and compatible by Dragon Naturally Speaking Preferred and Professional Software, Versions 8 and 9.

The transcription kit software for **Class 1 recorders** shall be compatible with Windows 98, XP & 2000 and Apple Mac operating systems 9.2 through 10.4.

The transcription kit software for the **Class 2 and 3 recorders** shall be compatible with a minimum of Windows XP & 2000 operating systems.

TYPE 2 ANALOG EQUIPMENT WITH MANUAL INDEXING

2A. PORTABLE (HAND HELD) RECORDER

Shall have the following features: start/stop, record/rewind controls, playback with volume control, battery strength indicator, and built-in microphone.

2B. TRANSCRIBING KIT, HEADSET, FOOT CONTROL, USB CABLE AND SOFTWARE

Not available for analog equipment.

2C. DESK TOP DICTATING UNIT & MIC

The unit shall include but not be limited to the following features: on/off/standby power switch, volume control, fast forward, rewind (back-up), erase capability, stop, play, functions, resettable digital display counter for approximate location and length of each recorded message. By setting the counter to zero at beginning of tape, readings can be noted to locate approximate points on the tape (end of letter, special instructions, etc.). Unit to be furnished with a hand held microphone with controls for record/start/stop/rewind and playback speaker.

2D. TRANSCRIBING UNIT, HEADSET & FOOT CONTROL

Unit to be compatible with and of the same manufacturer as in Section 2A and include the following as a minimum, but not limited to: volume control, fast forward, rewind (backspace), resettable digital counter (mechanical or led). Unit to be furnished with head set and foot controls for start, stop, backspace and rewind functions.

2E. COMBINATION DICTATING/TRANSCRIBING UNIT

Shall be a single unit combining all controls and features as defined in Sections 2A and 2B including microphone, head set and foot controls.

TYPE 3 ANALOG EQUIPMENT WITH ELECTRONIC CUEING (DUAL INDEXING MINIMUM) WITH VISUAL DISPLAY (AUTO SCAN & INDEXING)

3A. PORTABLE (HAND HELD) RECORDER

Shall have the following features (min). Start/stop, record/rewind controls, playback with volume control, dual cueing, battery strength indicator, built-in microphone.

3B. TRANSCRIBING KIT, HEADSET, FOOT CONTROL, USB CABLE AND SOFTWARE

Not available for analog equipment.

3C. DESK TOP DICTATING UNIT & MIC.

The unit shall include, but may not be limited to, the following features; on/off/standby power switch, volume control, fast forward, rewind (back-up), erase capability, stop and play functions. Unit shall have electronic cueing (dual indexing) on recording tape controlled by the microphone.

Unit shall have capability of indicating on the visual display the number, location, and approximate length of each recorded message and separating the indexing into categories for (1) letters, (2) special instructions. An electronic display or cursor shall show the exact point location of the tape in relationship to the indexing points at all times. The unit shall be capable of scanning the entire tape and automatically indexing to the desired indexed/cued point.

The cueing system shall place an audible or machine-readable tone on the recording media. Unit shall be capable of receiving a telephone recorded message. Unit to be furnished with a hand held microphone with controls for record/start/stop/rewind, electronic cue button (dual indexing), speaker/playback, on/off/standby power switch (if not on dictating unit).

3D. TRANSCRIBING UNIT, HEAD SET & FOOT CONTROL

Unit to be compatible with and of the same manufacturer as 3A and include the following features (min) on/off/standby power switch, volume control, speed control, fast forward, rewind (back space), erase capability, visual display as described in item 3A unit to be furnished with head set and foot controls for start/stop backspace and rewind functions.

3E. TRANSCRIBING UNIT, HEAD SET & FOOT CONTROL, CAPABLE OF RECEIVING TELEPHONE RECORDED MESSAGES)

Unit to be compatible with and of the same manufacturer as 3A and include the following features (min) on/off/standby power switch, volume control, speed control, fast forward, rewind (back space), erase capability, visual display as described in item 3A. Unit shall be capable of receiving telephone recorded messages. Unit to be furnished with head set and foot controls for start/stop backspace and rewind functions.

3F. COMBINATION DICTATING/TRANSCRIBING UNIT

Shall be a single unit having all controls and features as defined in Sections 3A, 3B and 3C including microphone, head set and foot controls.

IV. WARRANTY

The contractor warrants to the owner that all equipment furnished under this specification will be a new, current production model, of good material and workmanship. All equipment furnished under this specification is to be fully warranted (all parts, labor, adjustments, maintenance, technicians travel and if applicable, all shipping costs) for a minimum period of 12 months from date of acceptance by the using agency at no additional cost to the state.

V. SERVICE, PARTS, AND MANUALS

- A. Each machine furnished under this specification shall have a decal or other suitable label, which states whom the owner, should contact for service during the warranty period. The decal shall include the name, address, and phone number of the service point, date of delivery, and date of warranty expiration.
- B. One owner's manual shall be included with each machine furnished under this specification.
- C. Warranty service shall be provided by a factory authorized service facility, with service provided to the owner within 24 hours (next business day) from notification on any desk top type equipment.
- D The contractor shall maintain spare parts inventory for desktop type machines of known high mortality parts or components peculiar to each model desk top type furnished under this specification.

Availability of such parts shall be assured for a minimum of three years after expiration of initial warranty.

- E. For desk top type analog machines or the digital recorders, loaner equipment shall be provided, at no cost to the owner, for use during repair periods that exceed two business days during the warranty term. Repair periods exceeding two business days must be anticipated by the contractor and equipment furnished within that time frame. A repair period shall not exceed 30 days. Loaner equipment shall possess all functional capabilities present in equipment being serviced but need not be of the same make or model.
- F. The contractor shall maintain spare parts inventory for desk top type machines of known high mortality parts or components peculiar to each model desk top type furnished under this specification. Availability of such parts shall be assured for a minimum of three years after expiration of initial warranty.

VI. COMPUTER FIRMWARE AND SOFTWARE UPDATES

The contractor shall provide all firmware and software updates or revisions free of charge for the digital recorders, pc connectivity software and transcription kit software for a minimum of three years after expiration of the initial warranty period or not less than the term of the contract. The contractor shall document and maintain the product serial number, user and user location for the notification of the updates or revisions. If the software licenses are maintained by a separate ITS (Information Technology Services) director for the end user, then both that agency and registered product user shall receive notification of the available updates or revisions.

VII. DELIVERY

The vendor shall be responsible for the safe delivery of the equipment.

Machines shall be furnished with individual shipping cartons, suitable for reshipment. The ordering agency may require desktop machines to be delivered set-up at the operator's workstation at the time of initial delivery. Personal operating instructions shall be given the users by the contractor whenever requested by the buyer.

VIII. ORDERING DATA

Purchasers should exercise any desired option herein and should specify the following:

1. Title, number and date of this specification.
2. Type(s) and class (es) of machine(s) desired.
3. Type(s) of recording media (Section III.D.).
4. Accessories needed.
5. Prior to an order placement, the computer hardware and software compatibility needs to be determined by the purchaser, with that required by the digital recorder, the PC connectivity software and transcription kit software.
6. Unless otherwise specified by the purchaser, the contractor is responsible for demonstrating the functionality, security, and installation of the software to the satisfaction of the purchasing agency information technology services (ITS) director and/or his/her designee. The ITS designee may require a test installation of the hardware and software before a purchase recommendation can be provided. Once the agency has reviewed the software and license, approval will be determined whether to approve the purchase and accept or negotiate the terms or conditions of use with the contract holder. This requirement is applicable to the hardware and software employed with both the digital recorder and the transcription kit.
7. Unless otherwise specified by the purchaser, agencies are required to have their ITS director and/or his/her designee install the software or be present when the software is installed and are to maintain the software license(s) as applicable.
8. The State encourages vendors to provide the agency a hard copy manual and/or quick reference guide on how to use the software.

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